

California Regional Water Quality Control Board  
San Francisco Bay Region

Order 86-86

Water Reclamation Requirements for:

North Marin County Water District- Tomales Sewage Treatment Plant  
Town of Tomales  
Marin County

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter the Board), finds that:

1. The North Marin County Water District (hereinafter called the discharger), submitted a Report of Waste Discharge to the Board on June 5, 1986, for the discharge of wastewater from the Tomales Treatment Plant.
2. The Tomales Treatment Plant is located north-east of the intersection of Rt. 1 and Tomales-Petaluma Rd., in north-western Marin County (see attachment A), adjacent to the town of Tomales. The plant is near Tomales Creek, a tributary to Tomales Bay via Keys Creek and Walker Creek.
3. The treatment plant collects, treats, and disposes of 11,000 GPD (dry weather flow) of sewage from the unincorporated town of Tomales and the Shoreline Unified School District. Flows can reach up to 25,000 GPD in the winter. The treatment facilities consist of an aerated pond with a 1.1 MG capacity, two smaller filtration ponds, and disinfection facilities. The aeration pond has a design capacity of 38,000 GPD.

Following treatment, plant effluent is pumped to two storage ponds with a combined capacity of 10.2 MG, located about 3,600 feet south of the plant and adjacent to a 21-acre pasture area. The effluent is disinfected just prior to spray irrigation. The discharger uses 8 spray guns to irrigate; the guns are operated by an automatic timer during dry periods. No wastewater is discharged to surface waters.

The discharger also has the capability of using reclaimed water for landscape irrigation of the School District, though this has not been done during the last several years. If the School District resumes irrigation, they have two 0.6 MG storage ponds located about 2,000 feet northeast of the plant. The effluent will be chlorinated just before delivery to their storage ponds.

4. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin on July 21, 1982. The Basin Plan prohibits the discharge of wastewater with particular constituents of concern to beneficial uses into non-tidal waters, such as Walker Creek, and to Tomales Bay. The Basin Plan also

requires that existing groundwater quality be maintained unless otherwise provided by the State Water Resource Control Board.

5. The beneficial uses of Walker Creek and Tomales Bay are:
  - a. Cold and warm freshwater habitat (creek only)
  - b. Wildlife habitat
  - c. Preservation of rare and endangered species
  - d. Fish migration and spawning
  - e. Water contact and non-contact recreation
  - f. Commercial fishing, including shellfish harvesting (Tomales Bay only)
  - g. Marine habitat (Tomales Bay only)
6. The discharger is currently subject to waste discharge requirements contained in Order No. 76-38, adopted by the Board on April 20, 1976.
7. Section 13523 of the California Water Code provides that the Regional Board may, after consulting with and receiving the recommendation of the Department of Health Services and determining that such action is necessary to protect the public health, safety, and welfare, prescribe water reclamation requirements for water which is used or proposed to be used as reclaimed water.
8. The Department of Health Services has published regulations to establish acceptable levels of constituents in reclaimed water and to prescribe means for assuring reliability in the production of reclaimed water in order to assure that the use of reclaimed water for specified purposes does not impose undue risks to public health. The regulations are contained in Title 22 of the California Administrative Code and form the basis for these requirements.
9. Adoption of revised waste discharge requirements is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 2100 et. seq.) pursuant to Section 13389 of the California Water Code.
10. The discharger and interested persons have been notified of the Board's intent to reissue requirements for the existing discharge and have been provided with the opportunity to submit their comments.
11. The Board, at a properly-noticed public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder, that the discharger shall comply with the following:

A. Prohibitions

1. Overflows from the storage ponds are prohibited. There shall be no waste discharge to waters of the State from the wastewater collection, treatment, or disposal facilities.
2. Flow to the wastewater treatment plant shall not exceed 38,000 GPD (monthly average).
3. The discharge of waste other than domestic wastewater is prohibited.

B. Reclaimed Water Use Restrictions

1. No reclaimed water shall be applied to the disposal area during the wet weather season (November 15 through April 15). Reclaimed water may be applied during the remainder of the year, except when the ground is saturated or during periods when rainfall or runoff from adjacent land can occur.
2. No waste shall be allowed to escape from the discharger's property into waters of the State via surface flow, airborne spray or resurfacing after percolation.
3. Reclaimed water shall not be injected into any fixed irrigation system connected to a domestic water supply.
4. Use of reclaimed water on areas not shown on the map which is attached to this order (Attachment A) is prohibited without written authorization from the Executive Officer.
5. Waste shall not be applied within 25 feet of any ephemeral stream or within 100 feet of any other stream, pond (excluding wastewater storage pond), well, or housing.
6. Persons shall be effectively excluded from the areas where reclaimed water is applied. School District irrigation is not to be conducted during periods of public use.

C. Reclaimed Water Quality Specifications

1. The wastewater as discharged from the treatment and storage facilities to the pasture spray irrigation area shall meet the following effluent quality limits at all times:

COD	210 mg/l maximum
Dissolved oxygen	1.0 mg/l minimum
Dissolved sulfide	0.1 mg/l maximum
pH	Not less than 6.0 Upper limit to be determined though weekly self-monitoring (See Part D, no. 2 of Self- Monitoring Program)
Coliform organisms	Median MPN shall not exceed 240 organisms per 100 ml at some point in the treat- ment system (median value to be obtained from last 5 samples). The MPN of a single sample shall not exceed 10,000 organisms per 100 ml, when verified by a repeat sample taken within 48 hours

2. The wastewater as discharged from the treatment and storage facilities to the school district shall meet the quality limits as stated in 1., except that the median MPN of coliform organisms shall not exceed 2.2 per 100 ml. This median value shall be determined from the results of the last seven analyses, with samples collected and analyzed at least once each week.

3. Waste at the surface of the treatment and storage ponds shall meet the following quality limits at all times:

In any grab sample: dissolved sulfide 0.1 mg/l max  
dissolved oxygen 2.0 mg/l min

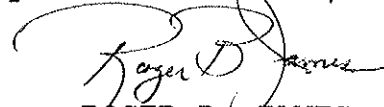
4. The discharger shall discontinue use of reclaimed water during any period in which there is reason to believe that the limits specified in C.1 are not being met.

D. Provisions

1. This order supercedes Order 76-38, which is hereby rescinded.
2. The discharger shall comply with all sections of this order immediately upon adoption.
3. The treatment, storage, or disposal of waste shall not create a nuisance, as defined in Section 13050(m) of the California Water Code
4. The disposal of waste shall not cause degradation of groundwater suitable for domestic water supply or cause an increase in any quality parameter that would render groundwater unsuitable for irrigation use.
5. A minimum freeboard of two feet shall be maintained in the storage and treatment ponds at all times.
6. Milking animals shall be excluded from the wastewater disposal area. Sufficient time should be provided between application of reclaimed water and grazing by non-milking animals to allow the wastewater disposal area to dry thoroughly.
7. The wastewater disposal area and any equipment used to transport wastewater shall be clearly identified with warning signs to inform the public that wastewater is present, and that this water is unfit for human consumption.
8. Fail-safe treatment shall be provided, including back-up power facilities as needed, to assure continuous compliance with these requirements.
9. Wastewater ponding which could provide a breeding area for mosquitoes shall be prevented.
10. Sludges and other solids removed from liquid wastes shall be disposed of at a legal point of disposal and in accordance with the provisions of Division 7.5 of the California Water Code. For the purposes of this requirement, a legal point of disposal is defined as one for which waste discharge requirements have been prescribed by a Regional Board and which is in full compliance therewith.

11. The discharger shall employ a treatment plant operator with at least a Grade II certification to supervise operation of the wastewater treatment plant, or demonstrate to the Executive Officer's satisfaction that an equivalent level of supervision is being maintained.
12. If someone other than the discharger is responsible for the schedule for applying reclaimed water, then the discharger shall inform that person or persons of these requirements, in a written agreement or other suitable manner.
13. In reviewing compliance with requirements A.1 and D.5, the Board will take special note of the difficulties which may be encountered in achieving compliance during entire wet seasons having a rainfall recurrence frequency greater than once in ten years.
14. In accordance with Section 13267(c) of the California Water Code, the discharger shall permit the Board or its authorized representative:
  - a. Entry upon premises in which an effluent source is located or in which any required records are kept
  - b. Access to copy any records required to be kept under terms and conditions of this order
  - c. Inspection of monitoring equipment of records
  - d. Sampling of any discharge
15. The discharger shall comply with the self-monitoring program as adopted by this Board and as may be amended by the Executive Officer.
16. The discharger shall file with the Board a report of waste discharge at least 120 days before making any material change in the character, location, or volume of the discharge.
17. The Board will review this Order periodically and may revise the requirements when necessary.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on November 19, 1986

A handwritten signature in cursive script, appearing to read "Roger B. James", written in dark ink.

ROGER B. JAMES  
Executive Officer

Attachments:

Map & Self-Monitoring Program





TOMALES QUADRANGLE

CALIFORNIA—MARIN CO.

75 MINUTE SERIES (TOPOGRAPHIC)

School NW 1/4 POINT BLISS 15' QUADRANGLE

122°52'30" 38°15'

1460 IV SW  
(VALLEY FORD)

55° R. 10 W.

RODEGA BAY 14 MI.  
VALLEY FORD 6.4 MI.

1:310 000 FEET 199

640 000 FEET

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

FINAL  
SELF-MONITORING PROGRAM  
FOR

NORTH MARIN WATER DISTRICT  
TOMALES TREATMENT PLANT  
MARIN COUNTY

ORDER 86-86

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

I.     GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16. The principal purposes of a self-monitoring program are:

1. To document compliance with waste discharge requirements and prohibitions established by this Regional Board
2. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge.

II.    DESCRIPTION OF SAMPLING AND OBSERVATION

A.     Treatment Plant Influent

Weekly, determine average daily flow in gallons per day (GPD). Calculate weekly total flow (also in GPD). Monthly, determine COD and total suspended solids (mg/l), from a grab sample at peak flow.

B.     Treatment Pond

1. Weekly, sample wastewater at any point one foot below the pond surface for the following:
  - Temperature
  - pH
  - dissolved oxygen concentration (mg/l)
  - dissolved sulfides (mg/l), if D.O. concentration is below 2.0 mg/l
2. Weekly, perform standard observations along the perimeter of the pond for the following:
  - freeboard (vertical distance from dike crest to water surface)
  - evidence of leaching liquid from the pond and estimated size of affected area (include sketch)
  - estimated number of waterfowl and other water-associated birds in the pond area
  - odor (if evident, note source and area affected)

C. Storage Ponds

1. Weekly, perform standard observations along the perimeter of the ponds for the following:
  - freeboard
  - evidence of leaching liquid from the pond and estimated size of affected area (include sketch)
  - odor (if evident, note source and area affected)
  - estimated number of waterfowl and other water-associated birds in the vicinity of the ponds
2. Weekly, during the irrigation season alone, sample the wastewater at any point one foot below the pond surface below the pond surface for the following:
  - temperature
  - pH
  - dissolved oxygen content (mg/l)
  - dissolved sulfides (mg/l), if D.O. concentration is below 2 mg/l

D. Wastewater Disposal Areas

1. Daily during the reclamation period, determine the volume of wastewater discharged to the wastewater disposal sites (both the pasture and the school district) in GPD. Calculate the monthly average (in GPD).
2. Weekly, during the reclamation season, sample the wastewater (at the pasture land disposal site) for the following:
  - COD (mg/l)
  - dissolved oxygen content (mg/l)
  - dissolved sulfide (if D.O. is less than 2 mg/l)
  - total coliform (MPN/100 ml)
  - pH
3. The wastewater used for the School District landscaping s to be sampled as stated in 2. (during the reclamation season) except that total coliform is to be sampled daily.
4. Weekly, during the reclamation period, perform the following observations in and around the perimeter of both waste water disposal areas:
  - evidence of any runoff from the site (if evident, use sketch map to show location and area affected) If runoff occurs, stop spraying immediately.
  - evidence of erosion caused by wastewater disposal

- odor (if evident, note area affected)
- mosquito breeding problems resulting from ponded wastewater
- proper posting of warning signs

### III. REPORTS TO BE FILED WITH THE BOARD

#### A. Violations of Requirements

In the event the discharger is unable to comply the conditions of the waste discharge requirements due to:

- maintenance work, power failures, or breakdown of waste treatment equipment
- bypassing of untreated or partially treated wastewater
- accidents caused by human error or negligence
- other causes such as acts of nature

The discharger shall notify the Board office by telephone(415-464-1255) as soon as she or her agents have knowledge of the incident and shall confirm this notification in writing within two weeks of the telephone notification. The written report shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to prevent the problem from recurring.

#### B. Self-Monitoring Reports

Written reports shall be filed monthly during irrigation season, and quarterly during the remainder of the year. All reports are to be submitted by the fifteenth day of the following month. The reports shall include:

1. Letter of transmittal: A letter transmitting self-monitoring reports shall accompany each report. Such a letter shall include a discussion of requirement violations found during the past month or quarter and actions taken or planned for correcting violations, such as plant operation modifications. The letter transmitting monitoring reports shall be signed by a responsible official. The letter shall contain a statement by the official that to the best of the signer's knowledge the report is true and correct.
2. Data: All results observed or analyzed per the requirements of section II, including dates and times of sampling and observations.


3. Map: A map shall accompany the report, showing the location of the treatment plant, storage pond, wastewater disposal area, and sampling/observation points.

I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order no.

2. Is effective on the date shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.



Roger B. James  
Executive Officer

Effective Date: November 19, 1986